RESPUESTAS DEL TRABAJO PRACTICO MATRICES Y DETERMINANTES

PARTE B DETERMINANTES

B. I)

1. a) $|A| = 7$
   b) $Mcd_{34} = -2$
   c) $Cd_{33} = -8$
   d) $|B| = 15$

2. a) $A^{-1} = \begin{pmatrix} 1/4 & -1/4 & 1/4 \\ -9/28 & 1/28 & 3/28 \\ 3/28 & 9/28 & -1/28 \end{pmatrix}_{3x3}$

3. a) $x = 2$ b) $x = 3$

B. II)

1. a) $|G| = 18$
   b) $Mcf_{13} = -16$
   c) $Cf_{14} = 32$
   d) $|E| = -40$

2. $B^{-1} = \begin{pmatrix} 1/9 & 7/18 & -1/18 \\ -2/9 & 2/9 & 1/9 \\ 1/18 & -1/18 & 2/9 \end{pmatrix}_{3x3}$

3. a) $x_1 = 3$; $x_2 = 2/3$
   b) $x_1 = 12$; $x_2 = 1$

B. III)

1. a) $|C| = 0$
      $|G| = -18$

   b) $Mcf_{23} = 0$
      $Mcd_{24} = 36$

   c) $Cd_{13} = -8$
      $Cf_{34} = -24$

   d) $|G| = 6$
      $|D| = -42$
      $|F| = 0$

2. $C^{-1} = \begin{pmatrix} -1 & 3/4 & 3/4 \\ 0 & 1/4 & 1/4 \\ -1 & 3/8 & 7/8 \end{pmatrix}_{3X3}$ $D^{-1} = \begin{pmatrix} 1/6 & -1/3 & 7/6 \\ -1/3 & -1/3 & 5/3 \\ -1/6 & 1/3 & -1/6 \end{pmatrix}_{3X3}$

3. $x_1 = -2$; $x_2 = 1$
   $x_1 = -7/2$; $x_2 = 2$